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10/735,713	12/16/2003	Thomas Brandenborg	45900-000449/US/DVA	3442

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HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195	DWIVEDI, MAHESH H

ART UNIT	PAPER NUMBER
2168	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	**Applicant(s)**
Office Action Summary	10/735,713	BRANDENBORG, THOMAS
	Examiner	**Art Unit**	
	Mahesh H. Dwivedi	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 December 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-60* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>16 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☒ Certified copies of the priority documents have been received in Application No. <u>09/5900906</u>.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20070215

DETAILED ACTION

Response to Amendment

1.   Receipt of Applicant's Amendment, filed on 12/01/2006, is acknowledged. The amendment includes the cancellation of the claim 4, the amending of claims 1, 5-7, 9, 43-45, 47.

Priority

2.   Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/590096, filed on 06/09/2000.

Claim Objections

3.   The objections raised in the office action mailed on 06/05/2006 have been overcome by the applicant's amendments received on 12/01/2006.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-2, 5-11, and 13-60 are rejected under 35 U.S.C. 102(e) as being anticipated by **Chiu et al.** (U.S. Patent 6,181,336).

6.   Regarding claim 1, **Chiu** teaches a content management system comprising:

A) data storing means (Column 26, lines 33-43, Figure 7), data retrieving means (Column 26, lines 19-32, Figure 7) and data processing means (Column 26, lines 44-52, Figure 7);

B) a database system adapted to store publishing content objects (PCOs) and metadata, the metadata being associated with PCOs in the content management system (Column 26, lines 44-65-Column 27, lines 1-4, Figure 7), ;

C) a number of workstations (Column 5, lines 27-30, Column 16, lines 9-16);

D) wherein the PCOs are arranged to be media neutral so as to enable re-use of the PCOs in publications of multiple media (Column 1, lines 57-66); and

E) that the content management system further facilitates planning and coordinating of usage of PCOs in one or more publications (Column 1, lines 57-66); and

F) wherein the planning and coordinating of usage of PCOs in one or more publications is achieved by maintaining relations between anticipated news stories and said publications (Column 1, lines 57-66, Column 16, lines 25-32, Column 20, lines 57-61).

The examiner notes that **Chiu** teaches **"data storing means"** as "repository 702" (Figure 7) and "repository 704" (Figure 7). The examiner further notes that **Chiu** teaches **"data retrieving means"** as "query 714" (Column 26, line 21, Figure 7). The examiner further notes that **Chiu** teaches **"data processing means"** as "content servers 708" (Figure 7) and "content servers 712" (Figure 7). The examiner further notes that **Chiu** teaches **"a database system adapted to store publishing content objects (PCOs) and metadata, the metadata being associated with PCOs in the content management system"** as "The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.), that are typically associated with services provided by database management systems" (Column 26, lines 53-56). The examiner further notes that **Chiu** teaches **"a database system adapted to store publishing content objects (PCOs) and metadata, the metadata being associated with PCOs in the content management system"** as "The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.), that are typically associated with services provided by database management systems" (Column 26, lines 53-56). The examiner further notes that **Chiu** teaches **"a number of**

workstations" as "functions provided are accessible form client stations over a computer network" (Column 5, lines 27-30) and having "shared development" (Column 16, lines 9-16) for "multiple users" (Column 16, lines 9-16). The examiner further notes that **Chiu** teaches **"wherein the PCOs are arranged to be media neutral so as to enable re-use of the PCOs in publications of multiple media"** as "the orderly archiving of multimedia works to facilitate their re-use in later projects" (Column 1, lines 60-61) and "Examples of multimedia works include feature animations films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66). The examiner further notes that according to the American Heritage College Dictionary, a publication is defined as "Communication of information to the public". The examiner further notes that "news clips" are clearly information that is conveyed to the public. The examiner further notes that **Chiu** teaches **"that the content management system further facilitates planning and coordinating of usage of PCOs in one or more publications"** as "the orderly archiving of multimedia works to facilitate their re-use in later projects" (Column 1, lines 60-61) and "Examples of multimedia works include feature animations films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66). The examiner further notes that **Chiu** teaches **"wherein the planning and coordinating of usage of PCOs in one or more publications is achieved by maintaining relations between anticipated news stories and said publications"** as "the orderly archiving of multimedia works to facilitate their re-use in later projects" (Column 1, lines 60-61), "Examples of multimedia works include feature animations films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66), "The present invention provides a means for users to link related assets within the Vault repository 108. For example, it may be reasonable to link a scene asset to the assets that are its frames, or a frame to the set of cels that were used to compose it, or a cel to the color model used to paint it. These

relationships provide another means for capturing important information about assets"
(Column 16, lines 26-32), and "As used herein, references (or relationships) are
attributes whose values contain identifiers of other AMS data objects. Thumbnail,
preview, and derivedFrom, as previously described, are references, for example"
(Column 20, lines 58-61).

Regarding claim 2, **Chiu** further teaches a content management system
comprising:

A) wherein the PCOs are arranged to be media neutral by comprising content elements
divided by their function (Column 9, lines 8-14, 12, lines 57-65-Column 13, lines 1-7,
Column 20, lines 49-56).

The examiner notes that **Chiu** teaches **"wherein the PCO's are arranged to be
media neutral by comprising content elements divided by their function"** as "Each
tool can define one or more asset types. In making this decision, the tool developer
decides what type of information is to be included for each instance of each asset type.
In other words, the tool developer in step 1004, defines the set of attributes and the
ranges of values permitted for such attributes, that comprise the metadata component
for each asset type that is to be defined in step 1006" (Column 9, lines 8-14),"
Cataloging is a process for specifying values for an asset's attributes. Cataloging may
occur on two occasions: (1) each time an asset is checked in; and/or (2) during archival.
At checkin time, some attributes are filled-in automatically. For example, the file size,
modification date and time, creator, may all be filled-in automatically, under program
control. Other asset attributes are provided by the user. For example, keywords used for
searching, and indexing, names of attributes, and other comments are typically filled-in
manually by users. At archival time, an archivist may add additional keywords to the
asset attributes via the cataloger tool, if desired. As described previously, the cataloging
function may be helped by the use of the Data Model Manager object provided in
StudioLib 104. The Data Model Manager helps the cataloging function ensure that all
the necessary attributes of an asset type are supplied for check in and that the values
are within the permitted ranges" (Column 12, lines 58-67-Column 13, lines 1-7), and "In

addition to those enumerated above, an AMS data object may have additional attributes

stored with it. Each attribute is given a unique name, a type and a value. The type that

is associated with an attribute is typically constrained to a predefined set, such as bool,

char, long, string, etc. Typically every instance of the same asset type (e.g. cel, frame,

scene, sequence, project), will use AMS data objects that have the same set of defined

attributes" (Column 20, lines 49-56).

Regarding claim 5, **Chiu** further teaches a content management system
comprising:

A) wherein the planning and <u>coordinating</u> of usage of PCOs comprises tentative or

dynamic planning and <u>coordinating</u> of usage of the PCOs and/or fixed planning and

coordinating of usage of the PCOs (Column 12, lines 57-67-Column 13, lines 1-7,

Column 16, lines 25-32).

      The examiner notes that **Chiu** teaches **"wherein the planning and
coordinating of usage of PCOs comprises tentative or dynamic planning and
coordinating of usage of the PCOs and/or fixed planning and coordinating of
usage of the PCOs"** as "The present invention provides a means for users to link

related assets with the vault repository 108" (Column 16, lines 26-27).

Regarding claim 6, **Chiu** further teaches a content management system
comprising:

A) wherein the planning and <u>coordinating</u> of usage of PCOs comprises approximate

and/or specific placement of PCOs, said placement referring to physical or visual

location of PCOs in one or more publications being planned (Column 13, lines 8-24).

      The examiner notes that **Chiu** teaches **"wherein the planning and
coordinating of usage of PCOs comprises approximate and/or specific placement
of PCOs, said placement referring to physical or visual location of PCOs in one or
more publications being planned"** as "The contents of the Vault repository 108 are

organized into structures that are useful to the user. Organization is a task that is

typically performed by a system administrator or the like. For example, it would be

convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24).

Regarding claim 7, **Chiu** further teaches a content management system comprising:
A) wherein the planning and <u>coordinating</u> of usage of PCOs comprises planning and <u>coordinating</u> of PCOs that are only planned for creation or still under creation or already existing PCOs (Column 5, lines 49-51).

The examiner notes that **Chiu** teaches **"wherein the planning and <u>coordinating</u> of usage of PCOs comprises planning and <u>coordinating</u> of PCOs that are only planned for creation or still under creation or already existing PCOs"** as "Another advantage of the present invention is that it provides support for automatic cataloging when assets are crated" (Column 5, lines 49-51).

Regarding claim 8, **Chiu** further teaches a content management system comprising:
A) wherein the PCOs comprise content of types used in news media selected from the group consisting of: daily or weekly newspapers, magazines, TV and radio stations, Internet sites and other electronic news media (Column 1, lines 57-67-Column 2, lines 1-4).

The examiner notes that **Chiu** teaches **"wherein the PCOs comprise content of types used in news media selected from the group consisting of: daily or weekly newspapers, magazines, TV and radio stations, Internet sites and other**

electronic news media" as "Examples of multimedia works can include feature animation films, computer animation films...news clips" (Column 1, lines 62-64).

Regarding claim 9, **Chiu** further teaches a content management system comprising:

A) wherein the planning and <u>coordinating</u> of usage of PCOs is performed by associating PCOs and information relating to PCOs with one or more layout budgets or lists, each layout budget or list having at least one publication associated with it, and each layout budget or list representing the planned content of the associated publication(s) or a part or section thereof (Column 3, lines 43-46, Column 1, lines 8-24).

The examiner notes that **Chiu** teaches **"wherein the planning and <u>coordinating</u> of usage of PCOs is performed by associating PCOs and information relating to PCOs with one or more layout budgets or lists, each layout budget or list having at least one publication associated with it, and each layout budget or list representing the planned content of the associated publication(s) or a part or section thereof"** as "complex assets can be defined which comprise a combination of assets. For example, a sequence asset can comprise a combination of assets each comprising a single frame" (Column 3, lines 43-46) and "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24).

Regarding claim 10, **Chiu** further teaches a content management system comprising:

A) wherein layout budgets or lists have at least one publication date and/or time associated with them, the publication date and/or time indicating the publication date and/or time of a publication associated with the layout budget or list (Column 12, lines 58-67).

The examiner notes that **Chiu** teaches **"wherein layout budgets or lists have at least one publication date and/or time associated with them, the publication date and/or time indicating the publication date and/or time of a publication associated with the layout budget or list"** as "For example, the file size, modification date and time, creator, may all be filled in automatically" (Column 12, lines 62-63).

Regarding claim 11, **Chiu** further teaches a content management system comprising:

A) wherein PCOs are added to or removed from layout budgets or lists or wherein information relating to PCOs is changed on layout budgets or lists, thereby facilitating dynamic planning of content intended for use in publications (Column 24, lines 60-67).

The examiner notes that **Chiu** teaches **"wherein PCOs are added to or removed from layout budgets or lists or wherein information relating to PCOs is changed on layout budgets or lists, thereby facilitating dynamic planning of content intended for use in publications"** as "The Vault API 106 provides support for the creation, placement, and deletion" (Column 12, lines 62-63).

Regarding claim 13, **Chiu** further teaches a content management system comprising:

A) means for filtering or sorting of PCOs based on their metadata, thereby facilitating presentation of an output according to said filtering or sorting (Column 26, lines 53-63).

The examiner notes that **Chiu** teaches **"means for filtering or sorting of PCOs based on their metadata, thereby facilitating presentation of an output according**

to said filtering or sorting" as "The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.)" (Column 26, lines 53-54).

Regarding claim 14, **Chiu** further teaches a content management system comprising:

A) wherein the metadata are used for ranking or prioritizing PCOs by associating one rank or priority out of a plurality of ranks or priorities with the metadata for a given PCO (Column 13, lines 8-24).

The examiner notes that **Chiu** teaches **"wherein the metadata are used for ranking or prioritizing PCOs by associating one rank or priority out of a plurality of ranks or priorities with the metadata for a given PCO"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24).

Regarding claim 15, **Chiu** further teaches a content management system comprising:

A) means for arranging the ranks or priorities of PCOs in a hierarchical structure (Column 13, lines 8-24).

The examiner notes that **Chiu** teaches **"means for arranging the ranks or priorities of PCOs in a hierarchical structure"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a

task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24).

Regarding claim 16, **Chiu** further teaches a content management system comprising:
A) means for associating a size with each PCO, the size indicating physical or visual space or time duration of the PCO when appearing in a publication (Column 19, lines 22-29, Column 20, lines 2-7).

The examiner notes that **Chiu** teaches **"means for associating a size with each PCO, the size indicating physical or visual space or time duration of the PCO when appearing in a publication"** as "dateCheckedOut" (Column 19, line 26), "dateCheckeln" (Column 19, line 26) and "Date the asset was checked out" (Column 20, lines 2-7).

Regarding claim 17, **Chiu** further teaches a content management system comprising:
A) means for associating a size with each PCO, the size indicating actual measured size or a planned size of the PCO when appearing in a publication (Column 19, lines 22-29, Column 20, lines 8-10).

The examiner notes that **Chiu** teaches **"means for associating a size with each PCO, the size indicating actual measured size or a planned size of the PCO**

when appearing in a publication" as "content size" (Column 19, line 6) and "The size of the object's contents" (Column 20, lines 8-10).

Regarding claim 18, **Chiu** further teaches a content management system comprising:

A) wherein a layout budget or list has a predefined maximum total size indicating the space or time available within a publication or a part or a section thereof being associated with the layout budget or list (Column 9, lines 44-46, Column 20, lines 8-11).

The examiner notes that **Chiu** teaches **"wherein a layout budget or list has a predefined maximum total size indicating the space or time available within a publication or a part or a section thereof being associated with the layout budget or list"** as "Some of the attribute values, such as time, date, and object size is typically filled-in automatically under program control" (Column 9, lines 44-46).

Regarding claim 19, **Chiu** further teaches a content management system comprising:

A) wherein at least one workstation provides access to the database system and all PCOs managed in the database system, irrespective of the storage location of any particular PCO (Column 5, lines 27-30, lines 66-67, Column 13, lines 32-48).

The examiner notes that **Chiu** teaches **"wherein at least one workstation provides access to the database system and all PCOs managed in the database system, irrespective of the storage location of any particular PCO"** as "all functions provided are accessible from client stations over a computer network" (Column 5, lines 27-30).

Regarding claim 20, **Chiu** further teaches a content management system comprising:

A) wherein the database system comprises a plurality of databases (Column 26, lines 44-52, Figure 7).

The examiner notes that **Chiu** teaches **"wherein the database system comprises a plurality of databases"** as "The file servers may be distributed among multiple content servers (as depicted by 708 and 712), which may reside in multiple computer systems that are couple together via a computer network" (Column 20, lines 45-48). The examiner further notes that Figure 7 depicts multiple databases.

Regarding claim 21, **Chiu** further teaches a content management system comprising:

A) wherein the plurality of databases is physically or geographically disparate (Column 26, lines 44-52, Figure 7).

The examiner notes that **Chiu** teaches **"wherein the plurality of databases is physically or geographically disparate"** as "The file servers may be distributed among multiple content servers (as depicted by 708 and 712), which may reside in multiple computer systems that are couple together via a computer network" (Column 20, lines 45-48). The examiner notes that the databases depicted in Figure 7 are disparate.

Regarding claim 22, **Chiu** further teaches a content management system comprising:

A) wherein each database of the plurality of databases is adapted to store PCOs and associated metadata for a particular enterprise or a branch of an enterprise (Column 18, lines 63-67-Column 19, lines 1-12).

The examiner notes that **Chiu** teaches **"wherein each database of the plurality of databases is adapted to store PCOs and associated metadata for a particular enterprise or a branch of an enterprise"** as "This architecture facilitates fast and efficient search and query capabilities of the present invention. It also provides for a choice of whether to permit searching capabilities for particular assets. For example, if searching capabilities for a particular asset is not desired, the attributes associated with such asset is not duplicated within the separate metadata tables 1106. However, if searching capabilities are desired, the architecture of the separate metadata tables

provides for fast and efficient searches" (Column 18, lines 63-67-Column 19, lines 1-4)·

and "For example, suppose a list of all assets created by `John Doe` is desired. In this

case, assume that an attribute named `Creator` having the type `String` has been

predefined. Thus, a search of the string metadata table 1106a is conducted until a set of

matches is found. The search is fast because each entry is known to contain only a

string value. Finally, a list of assets, identified by the object-ids in the string metadata

table 1106 is presented" (Column 19, lines 5-12).

Regarding claim 23, **Chiu** further teaches a content management system

comprising:

A) ·wherein each database of the plurality of databases comprises a searchable index

of the metadata and/or content associated with the PCOs stored in that database

(Column 26, lines 44-63).

The examiner notes that **Chiu** teaches **"wherein each database of the plurality**

of databases comprises a searchable index of the metadata and/or content

associated with the PCOs stored in that database" as "The metadata servers 706

and 710 provide services (such as searching, indexing, querying, etc.)" (Column 26,

lines 53-54).

Regarding claim 24, **Chiu** further teaches a content management system

comprising:

A) wherein the searchable indices are synchronised into a consolidated index, thereby

facilitating a consolidated access to or view of the PCOs stored in the plurality of

databases (Column 26, lines 44-52, Column 26, lines 53-63, Figure 7).

The examiner notes that **Chiu** teaches **"wherein the searchable indices are**

synchronised into a consolidated index, thereby facilitating a consolidated

access to or view of the PCOs stored in the plurality of databases" as "The file

servers may be distributed among multiple content servers (as depicted by 708 and

712), which may reside in multiple computer systems that are couple together via a

computer network" (Column 20, lines 45-48) and The metadata servers 706 and 710

provide services (such as searching, indexing, querying, etc.)" (Column 26, lines 53-54). The examiner notes that the databases depicted in Figure 7 are disparate.

Regarding claim 25, **Chiu** further teaches a content management system comprising:

A) wherein a central searchable index of metadata and/or content associated with the PCOs stored in the plurality of databases is provided, thereby facilitating a consolidated access to or view of the PCOs stored in the plurality of databases (Column 26, lines 44-52, Column 26, lines 53-63, Figure 7).

The examiner notes that **Chiu** teaches **"wherein a central searchable index of metadata and/or content associated with the PCOs stored in the plurality of databases is provided, thereby facilitating a consolidated access to or view of the PCOs stored in the plurality of databases"** as "The file servers may be distributed among multiple content servers (as depicted by 708 and 712), which may reside in multiple computer systems that are couple together via a computer network" (Column 20, lines 45-48) and The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.)" (Column 26, lines 53-54). The examiner notes that the databases depicted in Figure 7 are disparate.

Regarding claim 26, **Chiu** further teaches a content management system comprising:

A) wherein a consolidated access to or view of PCOs is provided, irrespective of their storage location or database (Column 5, lines 65-67, Column 16, lines 40-47, Column 20, lines 45-47, Column 24, lines 1-7).

The examiner notes that **Chiu** teaches **"wherein a consolidated access to or view of PCOs is provided, irrespective of their storage location or database"** as "Access control in the Vault repository 108 is based on access control lists (ACLs). An ACL identifies the users that are permitted access to the objects" (Column 24, lines 1-3).

Regarding claim 27, **Chiu** further teaches a content management system comprising:

A) means to support users from at least one workstation to perform the management task of tracking the status of one or more PCOs (Column 1, lines 66-67-Column 2, lines 1-4, Column 3, lines 46-52).

The examiner notes that **Chiu** teaches **"means to support users from at least one workstation to perform the management task of tracking the status of one or more PCOs"** as "The present invention assist artists, computer programmers, production managers, editors, directors, ad producers in tracking and managing" (Column 1, lines 66-67-Column 2, line 1).

Regarding claim 28, **Chiu** further teaches a content management system comprising:

A) means to support users to perform, from at least one workstation, the management task of associating metadata with one of a plurality of desk budgets, the desk budgets providing a list of PCOs that are planned or under creation within a given desk or department (Figure 2, Column 20, lines 2-7).

The examiner notes that **Chiu** teaches **"means to support users to perform, from at least one workstation, the management task of associating metadata with one of a plurality of desk budgets, the desk budgets providing a list of PCOs that are planned or under creation within a given desk or department"** as "dateCheckedOut: Date the asset version was checked out for modification. Note: This value is set by the present invention" (Column 20, lines 2-4).

Regarding claim 29, **Chiu** further teaches a content management system comprising:

A) means for supporting users from at least one workstation to perform the management task of organising PCOs into groupings (Column 4, lines 54-56, Column 13, lines 8-24).

The examiner notes that **Chiu** teaches **"means for supporting users from at least one workstation to perform the management task of organising PCOs into groupings"** as "it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree" (Column 13, lines 12-14).

Regarding claim 30, **Chiu** further teaches a content management system comprising:

A) wherein the means for organising PCOs into groupings comprises means for defining projects or projects and sub-projects in the content management system (Column 13, lines 8-24); and

B) means for including one or more PCOs in one or more projects or sub-projects, thereby facilitating an overview of PCOs involved in larger news events (Column 13, lines 8-24, Column 26, lines 53-63).

The examiner notes that **Chiu** teaches **"wherein the means for organising PCOs into groupings comprises means for defining projects or projects and sub-projects in the content management system"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene" (Column 13, lines 9-19). The examiner further notes that **Chiu** teaches **"means for including one or more PCOs in one or more projects or sub-projects, thereby facilitating an overview of PCOs involved in larger news events"** as "Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 20-24).

Regarding claim 31, **Chiu** further teaches a content management system comprising:

A) means for arranging the projects and sub-projects in a hierarchical structure (Column 4, lines 54-56, Column 13, lines 8-24).

The examiner notes that **Chiu** teaches **"means for arranging the projects and sub-projects in a hierarchical structure"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene" (Column 13, lines 9-19).

Regarding claim 32, **Chiu** further teaches a content management system comprising:

A) means for filtering PCOs by project or sub-project, thereby facilitating a presentation of PCOs related to the project or sub-project (Column 13, lines 8-24, Column 26, lines 53-63).

The examiner notes that **Chiu** teaches **"means for filtering PCOs by project or sub-project, thereby facilitating a presentation of PCOs related to the project or sub-project"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the

`ruff,` `cleanup` and `color` variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24) and "The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.)" (Column 26, lines 53-54).

Regarding claim 33, **Chiu** further teaches a content management system comprising:

A) wherein metadata are associated with projects or sub-projects, thereby providing information relating to the project or sub-project (Column 19, lines 22-51).

The examiner notes that **Chiu** teaches **"wherein metadata are associated with projects or sub-projects, thereby providing information relating to the project or sub-project"** as "Preferably AMS data objects have a set of mandatory attributes (metadata). These attributes are: object-id, versionName, versionNumber, type" (Column 19, lines 22-25).

Regarding claim 34, **Chiu** further teaches a content management system comprising:

A) wherein at least part of the metadata associated with a given project or sub-project is applied to the PCOs included in that project or sub-project (Column 13, lines 8-24, Column 20, lines 57-61).

The examiner notes that **Chiu** teaches **"wherein at least part of the metadata associated with a given project or sub-project is applied to the PCOs included in that project or sub-project"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a

sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene" (Column 13, lines 9-19) and "As used herein, references (or relationships) are attributes whose values contain identifiers of other AMS data objects. Thumbnail, preview, and derivedFrom, as previously described, are references, for example" (Column 20, lines 58-61).

Regarding claim 35, **Chiu** further teaches a content management system comprising:

A) wherein the means for organising PCOs into groupings comprises means for associating a selected plurality of PCOs, irrespective of other groupings in which they might be included, so as to form an association, thereby facilitating any subject, topical or other desired relationship between PCOs (Column 12, lines 57-67-Column 13, lines 1-7, Column 16, lines 25-32).

The examiner notes that **Chiu** teaches **"wherein the means for organising PCOs into groupings comprises means for associating a selected plurality of PCOs, irrespective of other groupings in which they might be included, so as to form an association, thereby facilitating any subject, topical or other desired relationship between PCOs"** as "The present invention provides a means for users to link related assets with the vault repository 108" (Column 16, lines 26-27).

Regarding claim 36, **Chiu** further teaches a content management system comprising:

A) means for filtering PCOs by association, thereby facilitating a presentation of associated PCOs (Column 13, lines 8-24, Column 26, lines 53-63).

The examiner notes that **Chiu** teaches **"means for filtering PCOs by association, thereby facilitating a presentation of associated PCOs"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a

particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the `ruff,` `cleanup` and `color` variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24) and "The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.)" (Column 26, lines 53-54).

The examiner notes that "The metadata servers 706 and 710 provide services (such as searching, indexing, querying, etc.)" (Column 26, lines 53-54) is analogous to **"means for filtering PCOs by association, thereby facilitating a presentation of associated PCOs"**.

Regarding claim 37, **Chiu** further teaches a content management system comprising:
A) means for linking between a PCO and any of its associated PCOs, thereby facilitating automatic or simplified maintenance of link relationships between associated PCOs (Column 4, lines 57-60, Column 16, lines 25-32).

The examiner notes that **Chiu** teaches **"means for linking between a PCO and any of its associated PCOs, thereby facilitating automatic or simplified maintenance of link relationships between associated PCOs"** as "The present invention provides a means for users to link related assets with the vault repository 108" (Column 16, lines 26-27).

Regarding claim 38, **Chiu** further teaches a content management system comprising:
A) means for assembling associated PCOs into packages intended or suggested for collective publication (Column 3, lines 43-46, Column 13, lines 8-24).

The examiner notes that **Chiu** teaches **"means for assembling associated PCOs into packages intended or suggested for collective publication"** as "In addition, complex assets can be defines which comprise a combination of assets" (Column 3, lines 43-44) and "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the 'ruff,' 'cleanup' and 'color' variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24).

Regarding claim 39, **Chiu** further teaches a content management system comprising:
A) means for describing the category or nature of a given PCO's relationship with its associated PCOs (Column 4, lines 57-60, Column 13, lines 8-24, Column 16, lines 25-32).

The examiner notes that **Chiu** teaches **"means for describing the category or nature of a given PCO's relationship with its associated PCOs"** as "The contents of the Vault repository 108 are organized into structures that are useful to the user. Organization is a task that is typically performed by a system administrator or the like. For example, it would be convenient to collect all assets that are created for a particular animation feature under a single asset tree. In this example, the root of the tree is an object that represents the production. Leaves represent the sequences of the feature. In addition, the leaves of a sequence represents the scenes that make up the sequence. A scene, in turn, may comprise subtrees that represent the 'ruff,' 'cleanup' and 'color'

variants of the scene. Browsing is accomplished when a user navigates through an asset tree. While browsing, the user views the contents of an asset tree and the nodes and leaves that comprise the assets of a particular tree. Browsing is very much like navigating the directory hierarchy of a file system" (Column 13, lines 9-24) and "The present invention provides means for users to link related assets within the Vault repository 108" (Column 16, lines 26-27).

Regarding claim 40, Chiu further teaches a content management system comprising:

A) wherein the database system comprises means for creating one or more assignments, each assignment being an administrative entity for managing one or more PCOs, the PCO(s) being planned for creation or still under creation or already existing PCO(s) (Column 9, lines 34-41).

The examiner notes that Chiu teaches **"wherein the database system comprises means for creating one or more assignments, each assignment being an administrative entity for managing one or more PCOs, the PCO(s) being planned for creation or still under creation or already existing PCO(s)"** as "this will take place either upon creating a new asset or when new assets are checked into the Vault 108. In any case, all attribute values should be assigned before an asset is checked into the Vault 108" (Column 9, lines 38-41).

Regarding claim 41, Chiu further teaches a content management system comprising:

A) means for associating metadata with assignments (Column 16, lines 40-47, Column 19, lines 22-51, Column 20, lines 39-47).

The examiner notes that Chiu teaches **"means for associating metadata with assignments"** as "The Vault API 106 permits an authorized person, for example, the production manager, to specify who has access to particular public assets and who may modify particular public assets. In addition, individual users control when assets they are developing in their private workspaces, are to be made public and available to

others, via the Vault repository 108" (Column 16, lines 41-47) and "this will take place either upon creating a new asset or when new assets are checked into the Vault 108. In any case, all attribute values should be assigned before an asset is checked into the Vault 108" (Column 9, lines 38-41).

Regarding claim 42, **Chiu** further teaches a content management system comprising:

A) wherein at least part of the metadata associated with an assignment applies to one or more PCOs being managed through that assignment as well as to the assignment itself (Column 16, lines 40-47, Column 19, lines 22-51, Column 27, lines 1-4).

The examiner notes that **Chiu** teaches **"wherein at least part of the metadata associated with an assignment applies to one or more PCOs being managed through that assignment as well as to the assignment itself"** as "The Vault API 106 permits an authorized person, for example, the production manager, to specify who has access to particular public assets and who may modify particular public assets. In addition, individual users control when assets they are developing in their private workspaces, are to be made public and available to others, via the Vault repository 108" (Column 16, lines 41-47) and "this will take place either upon creating a new asset or when new assets are checked into the Vault 108. In any case, all attribute values should be assigned before an asset is checked into the Vault 108" (Column 9, lines 38-41).

Regarding claim 43, **Chiu** further teaches a content management system comprising:

A) wherein the metadata comprises at least one of the following types of information relating to assignment management: an address and/or name of a geographical location of a news event, one or more people expected to attend a news event, a start time and/or end time and/or duration of a news event, one or more contacts at a news event, one or more appointments at a news event, one or more items of research information or interviews or links to such items, and a deadline (Column 19, lines 22-51, Column 20, lines 39-47, lines 48-61).

The examiner notes that **Chiu** teaches **"wherein the metadata comprises at least one of the following types of information relating to assignment management: an address and/or name of a geographical location of a news event, one or more people expected to attend a news event, a start time and/or end time and/or duration of a news event, one or more contacts at a news event, one or more appointments at a news event, one or more items of research information or interviews or links to such items, and a deadline"** as "As used herein, references (or relationships) are attributes whose values contain identifiers of other AMS data objects. Thumbnail, preview, and derivedFrom, as previously described, are references, for example" (Column 20, lines 58-61).

Regarding claim 44, **Chiu** further teaches a content management system comprising:

A) wherein the metadata comprises at least one of the following types of information: a slug or name, a description, an origination, a type, a status, a reference to at least one publication, keywords, an abstract or summary, notes, a modification log, access control information, an originating newsroom, an originating desk, an assignment editor, an author, a deadline, and intellectual property rights (Column 12, lines 57-67-Column 13, lines 1-7, Column 19, lines 22-51, Column 20, lines 45-47).

The examiner notes that **Chiu** teaches **"wherein the metadata comprises at least one of the following types of information: a slug or name, a description, an origination, a type, a status, a reference to at least one publication, keywords, an abstract or summary, notes, a modification log, access control information, an originating newsroom, an originating desk, an assignment editor, an author, a deadline, and intellectual property rights"** as "Preferably AMS data objects have a set of mandatory attributes (metadata). These attributes are: object-id, versionName, versionNumber, type...accessControlList" (Column 19, lines 22-27) and "accessControlList: This field determines who is allowed access to the data object's digital contents" (Column 20, lines 45-47).

Regarding claim 45, **Chiu** further teaches a content management system comprising:

A) wherein the metadata comprises at least one of the following types of information referring to a publication: a name, a publication date and/or time, a revision specific edition, a geographical or topical edition, a logical or physical storage address in a computer system, a specific physical or visual placement or location within the publication,, a deadline a layout budget or list associated with the publication, a size of the publication or within in the publication, <u>and</u> a ranking or priority within the publication (Column 19, lines 22-51).

The examiner notes that **Chiu** teaches **"wherein the metadata comprises at least one of the following types of information referring to a publication: a name, a publication date and/or time, a revision specific edition, a geographical or topical edition, a logical or physical storage address in a computer system, a specific physical or visual placement or location within the publication,, a deadline a layout budget or list associated with the publication, a size of the publication or within in the publication, <u>and</u> a ranking or priority within the publication"** as "Preferably AMS data objects have a set of mandatory attributes (metadata). These attributes are: object-id, versionName, versionNumber, type...accessControlList" (Column 19, lines 22-27) and "Object-is: This is a data object identifier that is provided by the Vault API 106 when an asset is created" (Column 19, lines 36-38).

Regarding claim 46, **Chiu** further teaches a content management system comprising:

A) means for ensuring that metadata contain only valid combinations of information (Column 17, lines 54-56).

The examiner notes that **Chiu** teaches **"means for ensuring that metadata contain only valid combinations of information"** as "Preferably, the contents of each asset are stored directly in the Vault repository 108 so that the present invention can control and guarantee the integrity of such assets" (Column 17, lines 54-56).

Regarding claim 47, **Chiu** further teaches a content management system comprising:

A) wherein the metadata comprises at least one of the following types of information relating to access control: permissions to view the existence of an item in the database system, permission types and/or levels of access to an item in the database system, and rules specifying conditions for specific permissions to take effect on an item in the database system (Column 5, lines 65-67, Column 20, lines 45-47).

The examiner notes that **Chiu** teaches **"wherein the metadata comprises at least one of the following types of information relating to access control: permissions to view the existence of an item in the database system, permission types and/or levels of access to an item in the database system, and rules specifying conditions for specific permissions to take effect on an item in the database system"** as "Another feature of the present invention is that it provides support for various levels of access control" (Column 5, lines 66-67) and "accessControlList: This field determines who is allowed access to the data object's digital contents" (Column 20, lines 45-47).

Regarding claim 48, **Chiu** further teaches a content management system comprising:

A) wherein at least part of the metadata are stored as database fields in the database system (Column 19, lines 22-51, Column 26, lines 53-56).

The examiner notes that **Chiu** teaches **"wherein at least part of the metadata are stored as database fields in the database system"** as "The metadata servers 708 and 712 provide services (such as searching, indexing, querying, etc.) that are typically associated with services provided by database management systems" (Column 26, lines 53-56).

Regarding claim 49, **Chiu** further teaches a content management system comprising:

A) wherein at least part of the metadata are stored as tags and/or attributes within the content associated with PCOs (Column 19, lines 22-51).

The examiner notes that **Chiu** teaches **"wherein at least part of the metadata are stored as tags and/or attributes within the content associated with PCOs"** as "Preferably AMS data objects have a set of mandatory attributes (metadata). These attributes are: object-id, versionName, versionNumber, type" (Column 19, lines 22-25).

Regarding claim 50, **Chiu** further teaches a content management system comprising:

A) wherein the database system comprises means for enabling a system administrator or workstation user to define one or more additional metadata fields, thereby facilitating customised information to be stored in the database system (Column 2, lines 52-56, Column 11, lines 17-24, Column 13, lines 33-48).

The examiner notes that **Chiu** teaches **"wherein the database system comprises means for enabling a system administrator or workstation user to define one or more additional metadata fields, thereby facilitating customised information to be stored in the database system"** as "The activities that fall under system administration can include: configuring content servers (described below); specifying the content servers where different assets should be placed; setting access controls; specifying which versions of assets should be kept online, nearline and offline storage; specifying how many copies of (a version of) an asset to have online for performance and availability reasons and where these copies should be placed; systematic monitoring and reporting of AMS operations; and periodic adjustments to configurations to maintain proper performance" (Column 13, lines 33-48).

Regarding claim 51, **Chiu** further teaches a content management system comprising:

A) wherein a set of metadata fields is definable by a system administrator or workstation user (Column 2, lines 52-56, Column 11, lines 17-24, Column 13, lines 33-48).

The examiner notes that **Chiu** teaches **"wherein a set of metadata fields is definable by a system administrator or workstation user"** as "The activities that fall under system administration can include: configuring content servers; specifying the content servers where different assets should be placed; setting asset controls" (Column 13, lines 33-36).

Regarding claim 52, **Chiu** further teaches a content management system comprising:

A) wherein substantially all metadata fields are definable by a system administrator or workstation user (Column 2, lines 52-56, Column 11, lines 17-24, Column 13, lines 33-48).

The examiner notes that **Chiu** teaches **"wherein substantially all metadata fields are definable by a system administrator or workstation user"** as "The activities that fall under system administration can include: configuring content servers; specifying the content servers where different assets should be placed; setting asset controls" (Column 13, lines 33-36).

Regarding claim 53, **Chiu** further teaches a content management system comprising:

A) wherein a set of metadata fields is definable by the content type of a given PCO (Column 2, lines 52-56, Column 11, lines 17-24, Column 13, lines 33-48).

The examiner notes that **Chiu** teaches **"wherein a set of metadata fields is definable by the content type of a given PCO"** as "provided is a means for modifying and/or adding extensions to the plurality of utilities and services provided by the present invention" (Column 2, lines 52-54) and "Either tool can then modify the asset, if desired" (Column 11, lines 17-18).

Regarding claim 54, **Chiu** further teaches a content management system comprising:

A) wherein at least some PCOs or other database items stored in the database system are associated with specific icons, thereby allowing.a workstation user to identify the type of item by a visual appearance of its icon (Column 20, lines 18-24).

The examiner notes that **Chiu** teaches **"wherein at least some PCOs or other database items stored in the database system are associated with specific icons, thereby allowing a workstation user to identify the type of item by a visual appearance of its icon"** as "This field contains the AMS data object identifier of the asset version's thumbnail" (Column 20, lines 18-19). The examiner further notes that it is common knowledge that a thumbnail is an icon displayed on a graphical user interface for a user to access.

Regarding claim 55, **Chiu** further teaches a content management system comprising:
A) wherein changes to metadata or changes to content associated with PCOs are logged during a news media production workflow (Column 26, lines 26-32).

The examiner notes that **Chiu** teaches **"wherein changes to metadata or changes to content associated with PCOs are logged during a news media production workflow"** as "The production management tools also provide functions for workflow management" (Column 26, lines 31-32). The examiner further notes that it is common knowledge that metadata is recorded and logged during the workflow management system of **Chiu**.

Regarding claim 56, **Chiu** further teaches a content management system comprising:
A) wherein automation rules defined by system administrators or by workstation users enable triggering of automatic actions based on changes to metadata values or changes to content associated with PCOs (Column 5, lines 49-51, Column 19, lines 22-29).

The examiner notes that **Chiu** teaches **"wherein automation rules defined by system administrators or by workstation users enable triggering of automatic**

actions based on changes to metadata values or changes to content associated with PCOs" as "Another advantage of the present invention is that it provides support for automatic cataloging when assets are created" (Column 5, lines 49-51) and "Preferably AMS data objects have a set of mandatory attributes (metadata). These attributes are: object-id, versionName, versionNumber, type, is Versioned, dateCheckedOut, dateCheckedIn, contentSize, accessControlList, and replicaLocations. Some of these are set automatically by the invention either when an asset is checked in or when it is checked out" (Column 1-9, lines 22-29).

Regarding claim 57, **Chiu** further teaches a content management system comprising:
A) wherein at least one notifying or alerting users, triggering workflow events, triggering user specified actions, triggering automatic archival or purging, and triggering a routing of PCOs or other database items <u>are triggered when the condition of an automation rule is met</u> (Column 5, lines 5-9, Column 10, lines 20-23)

The examiner notes that **Chiu** teaches **"wherein at least one notifying or alerting users, triggering workflow events, triggering user specified actions, triggering automatic archival or purging, and triggering a routing of PCOs or other database items <u>are triggered when the condition of an automation rule is met</u>"** as "Another advantage of the present invention is that it provides support for automatic cataloging when assets are created" (Column 5, lines 49-51) and "Preferably AMS data objects have a set of mandatory attributes (metadata). These attributes are: object-id, versionName, versionNumber, type, is Versioned, dateCheckedOut, dateCheckedIn, contentSize, accessControlList, and replicaLocations. Some of these are set automatically by the invention either when an asset is checked in or when it is checked out" (Column 1-9, lines 22-29).

Regarding claim 58, **Chiu** further teaches a content management system comprising:

A) wherein production and/or publication of media output using the PCOs stored in the database system is facilitated by one or more production systems integrated with the database system (Abstract, Column 3, lines 66-67-Column 4, lines 1-9).

The examiner notes that **Chiu** teaches **"wherein production and/or publication of media output using the PCOs stored in the database system is facilitated by one or more production systems integrated with the database system"** as "a consistent and integrated multimedia production environment in the form of common utilities, methods, and services" (Abstract) and "Assets are implemented using a technique referred to herein as `data modeling`. Data modeling provides the support for the inquiry of assets during runtime. For example, at runtime, a multimedia production tool can determine information pertaining to any asset in the Vault. This enables the generation of a class of tools that can be used to work with all types of assets, including those that may be newly defined during the production process. For example, a generic browser can be implemented to convey detailed information about assets of any type, by using the run-time inquiry feature provided by an implementation of the present invention" (Column 3, lines 66-67-Column 4, lines 1-9)

Regarding claim 59, **Chiu** further teaches a content management system comprising:
A) wherein PCOs or at least some metadata associated with PCOs stored in the database system are accessible from a production system (Column 26, lines 53-67-Column 27, lines 1-4).

The examiner notes that **Chiu** teaches **"wherein PCOs or at least some metadata associated with PCOs stored in the database system are accessible from a production system"** as "wherein PCOs or at least some metadata associated with PCOs stored in the database system are accessible from a production system" (Column 26, lines 53-54). The examiner further notes that it is common knowledge that one must access a device in order to utilize functions such as searching/indexing/querying.

Regarding claim 60, **Chiu** further teaches a content management system comprising:

A) wherein PCOs or at least some status or production data or other metadata from a production system are accessible from the content management system (Column 5, lines 65-67, Column 16, lines 40-47, Column 20, lines 45-47, Column 24, lines 1-7).

The examiner notes that **Chiu** teaches **"wherein PCOs or at least some status or production data or other metadata from a production system are accessible from the content management system"** as "Access control in the Vault repository 108 is based on access control lists (ACLs). An ACL identifies the users that are permitted access to the objects" (Column 24, lines 1-3).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chiu et al.** (U.S. Patent 6,181,336) as applied to claims 1-2, 5-11, and 13-60 and in view of **Nasr et al.** (U.S. Patent 6,263,332).

9.   Regarding claim 3, **Chiu** does not explicitly teach a content management system comprising:

A) wherein the PCOs are arranged to be media neutral by storing or managing them using an XML based structure.

Nasr, however, teaches **"wherein the PCOs are arranged to be media neutral by storing or managing them using an XML based structure"** as "information retrieval and in particular to a query and transformative engine applicable to eXtensible Markup Language (XML) documentation" (Column 1, lines 6-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Nasr's** would have allowed **Chiu's** to provide a method have a standardized markup language to store and present documents to requesting users, as noted by **Nasr** (Column 8, lines 55-58).

10.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chiu et al.** (U.S. Patent 6,181,336) as applied to claims 1-2, 5-11, and 13-60 and in view of **Milstead et al.** (U.S. Patent 6,345,256).

11.   Regarding claim 12, **Chiu** does not explicitly teach a content management system comprising:

A) wherein metadata are used for approving or suspending PCOs associated with layout budgets or lists, thereby facilitating tentative or preliminary planning of individual PCOs intended for use in publications.

Milstead, however, teaches **"wherein metadata are used for approving or suspending PCOs associated with layout budgets or lists, thereby facilitating tentative or preliminary planning of individual PCOs intended for use in publications"** as "Supervised Release Tool" (Column 65, line 23) and "approve its contents" (Column 65, line 30), and "The supervised release process 806 allows a quality check and validation of information specified for digital content product…After reviewing all information and comments, the Supervisor has the following options: approve release and queue the product for Metadata SC(s) Creation Process 807" (Column 54, lines 30-40).

The examiner notes that "approve release and queue the product" (Column 54, lines 30-40) is analogous to **"wherein metadata are used for approving or**

suspending PCOs associated with layout budgets or lists, thereby facilitating tentative or preliminary planning of individual PCOs intended for use in publications".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Milstead's** would have allowed **Chiu's** to provide a method have supervised approval of completed work in publishing media, as noted by **Milstead** (Column 65, lines 23-44).

Response to Arguments

12.   Applicant's arguments filed on 12/01/2006 have been fully considered but they are not persuasive.

Applicant goes on to argue on page 15, that **"Applicants direct the Examiner's attention to 37 C.F.R...Applicants further respectfully submit that the Information Disclosure Statement of 12/16/2003 is in compliance with 37 C.F.R 1.98(d)(2)"**. However, the examiner wishes to state that parent application 09/590096 is in paper form only, and as result, the relied non-patent literature and foreign art are not scanned into the system. The examiner wishes to state that applicant submit the cited non-patent literature and foreign patent documents, so that they can be scanned into the system.

Applicant goes on to argue on pages 15-16, that **"Applicants direct the Examiner's attention to the file-wrapper of Application 09/590096...will find a copy of the Danish priority application"**. The examiner accepts foreign priority for the instant application, but again requests that applicant submit a copy of the aforementioned Danish application, so as the foreign application can be scanned into the system.

Applicant goes on to argue on page 17, that **"Applicants assert that the term "multimedia" as used in Chiu et al. does not have the same definition as "publishing in multiple media" as used in claim 1"**. However, the examiner wishes to point to Columns 1 and 2 of **Chiu** which state "Examples of multimedia works can include feature animation films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions,

multimedia sales catalogs and the like" (Column 1, lines 62-66) and "Multimedia data, as the term is used herein, includes any and all types of data used to produce any and all types of multimedia works. Each instance of multimedia data need not comprise multiple data components or different types of media. Indeed multimedia data can comprise data of a single media type. For example, a JPEG data file is an industry standard for a compressed data format that comprises a single still video image. Even though a JPEG file comprises a single media type, it is considered to be multimedia data because it can be used as part of a multimedia production. Likewise, a multimedia authoring tool that can be used to create JPEG files may be referred to herein as a multimedia tool. Multimedia data can also comprise multiple types of media. For example, an MPEG data file is an industry standard for a compressed data format that comprises full-motion video as well as audio data components. Thus, an MPEG data file is another example of multimedia data" (Column 2, lines 5-21). The examiner further wishes to state that one can broadly interpret news clips and images (see "JPEG") as multiple forms of media.

Applicant goes on to argue on page 17, that **"According to example embodiments of the present invention, multiple media means more than one publishing media or platform, such as newspapers, magazines...a file or product containing interactive or moving content (such as in a video product) as opposed to static content (such as in printed publications). Multimedia production does not in itself deal with the actual publishing in any media platforms, let alone in multiple media"**. However, the examiner wishes to point to Columns 1 and 2 of **Chiu** which state "Examples of multimedia works can include feature animation films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66) and "Multimedia data, as the term is used herein, includes any and all types of data used to produce any and all types of multimedia works. Each instance of multimedia data need not comprise multiple data components or different types of media. Indeed multimedia data can comprise data of a single media type. For example, a JPEG data file is an industry standard for a compressed data

format that comprises a single still video image. Even though a JPEG file comprises a single media type, it is considered to be multimedia data because it can be used as part of a multimedia production. Likewise, a multimedia authoring tool that can be used to create JPEG files may be referred to herein as a multimedia tool. Multimedia data can also comprise multiple types of media. For example, an MPEG data file is an industry standard for a compressed data format that comprises full-motion video as well as audio data components. Thus, an MPEG data file is another example of multimedia data" (Column 2, lines 5-21). The examiner further wishes to state that news clips and images (see "JPEG") as comprise different media platforms. Moreover, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "newspapers, magazines, weeklies, posters, web sites, news streamers, emails, or text messages" and "static content (such as in printed publications") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on page 18, that **"Applicants respectfully submit that "pulling content from the archive and re-using it in a later project" is very different form the dynamic (upfront and ongoing) planning of content use in multiple publications of multiple media and the storing of said content in a media neutral format that enables it to be formatted, displayed, and presented in multiple media, as taught by claim 1"**. However, the examiner wishes to refer the applicant to Column 1 of **Chiu** which state "the orderly archiving of multimedia works to facilitate their re-use in later projects" (Column 1, lines 60-61) and "Examples of multimedia works can include feature animation films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66). The examiner further wishes to state that claim 1 merely states "the PCO's are arranged to be media neutral so as to enable re-use of the PCOs in publication of multiple media". The examiner further wishes to state that one can broadly interpret using an

archive to re-use stored media content in future projects as "[enabling] re-use of the PCOs in publication of multiple media". Moreover, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "dynamic (upfront and ongoing)" and "formatted, displayed, and presented") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on page 18, that **"Chiu specifically limits re-use to "later projects", whereas example embodiments of the present invention specifically target a newsroom where all publishing in all publications must take place now (or within the same publishing day) while a news story is still relevant"**. However, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a newsroom where all publishing in all publications must take place now (or within the same publishing day) while a news story is still relevant") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on page 18, that **"Chiu does not teach media neutrality of its content format, which implies that in order for content to be re-used in different publications it must be stripped of its original formatting, display, and presentation and re-formatted for the new publication"**. However, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "media neutrality of its content format, which implies that in order for content to be re-used in different publications it must be stripped of its original formatting, display, and presentation and re-formatted for the new publication") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from

the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on pages 18-19, that **"publication can be defined as "Communication to the public" and that since Chiu mentions news clips as a type of video project, the examiner concludes that Chiu teaches publishing in multiple publications of multiple media...combined with the very broad definition of the term "publication" in one dictionary, does not even indirectly, mean that Chiu et al. teaches anything about news publishing. Example embodiments of the present invention specifically teachers and enables planning and publishing in multiple publication of multiple media and that Chiu does not teach any of these. In fact, Chiu et al. does not even teach any of the planning, news gathering and story (script) writing aspect even for news clips, much less the actual publishing of said news clips in any media platform"**. However, the examiner wishes to refer the applicant to Column 1 of **Chiu** which states "Examples of multimedia works can include feature animation films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66). Furthermore, the examiner wishes to state that independent claim 1 merely recites publishing, and not news/print publishing. The examiner further wishes to state that since one can broadly interpret publishing as the definition cited in the rejection of independent claim 1 (see "Communication of information to the public"), then **Chiu** teaches the aforementioned publishing (see "news clips"). Moreover, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "news gathering and story (script) writing aspect even for news clips, much less the actual publishing of said news clips in any media platform") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on pages 19-20, that **"Applicants respectfully submit that Chiu does not teach how each multimedia project can target multiple publications or media—only how its archive may allow a project to be re-used in later projects. This is fundamentally different form the example embodiments of the present invention which specifically teaches the planning of news stories in a way that facilitates simultaneous and/or ongoing publishing in several news publications and storing content in a media neutral format that facilitates publishing in multiple publications and media without first stripping old formatting from archived content"**. However, the examiner wishes to refer the applicant to Column 1 of **Chiu** which state "the orderly archiving of multimedia works to facilitate their re-use in later projects" (Column 1, lines 60-61) and "Examples of multimedia works can include feature animation films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66). Furthermore, the examiner wishes to state that independent claim 1 merely recites the limitations "the PCOs are arranged to be media neutral so as to enable re-use of the PCOs in publications of multiple media" and "the content management system further facilitates planning and coordinating of usage of PCOs in one or more publications". The examiner further wishes to state that **Chiu's** method of re-using stored media content in a future project broadly teaches the aforementioned limitation, since the limitations merely recite (**one or more publications**). Moreover, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "how each multimedia project can target multiple publications or media" and "planning of news stories in a way that facilitates simultaneous and/or ongoing publishing in several news publications and storing content in a media neutral format that facilitates publishing in multiple publications and media without first stripping old formatting from archived content") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on page 20, that **"This section of Chiu teaches relationships between assets, bust has no bearing on the planning and coordinating features recited in claim 1"**. However, the examiner wishes to refer the applicant to Columns 1, 16, and 20 of **Chiu** which state "the orderly archiving of multimedia works to facilitate their re-use in later projects" (Column 1, lines 60-61), "Examples of multimedia works include feature animations films, computer animation films, video games, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs and the like" (Column 1, lines 62-66), "The present invention provides a means for users to link related assets within the Vault repository 108. For example, it may be reasonable to link a scene asset to the assets that are its frames, or a frame to the set of cels that were used to compose it, or a cel to the color model used to paint it. These relationships provide another means for capturing important information about assets" (Column 16, lines 26-32), and "As used herein, references (or relationships) are attributes whose values contain identifiers of other AMS data objects. Thumbnail, preview, and derivedFrom, as previously described, are references, for example" (Column 20, lines 58-61). The examiner further wishes to state that the relationships amongst the assets in **Chiu** (see "The present invention provides a means for users to link related assets within the Vault repository 10") broadly teaches the recited limitation "the planning and coordinating of usage of PCOs in one or more publications is achieved by maintaining relations between anticipated news stories and said publication.

Applicant goes on to argue on pages 20-21, that **"Applicants respectfully submit, that there is almost no comparison between the two and the referenced language in Chiu does in any way teach media neutrality. "Function" as used in Claim 2 refers to the contextual use of each of several elements within the content of a PCO, particularly a text for newspaper, magazine or web sites. Examples of such functions would be Headline, SubHead, Byline, Body Text etc."**. However, the examiner wishes to refer the applicant to Columns 9, 12, and 20 of **Chiu** which state ""Each tool can define one or more asset types. In making this decision, the tool developer decides what type of information is to be included for each instance of

each asset type. In other words, the tool developer in step 1004, defines the set of

attributes and the ranges of values permitted for such attributes, that comprise the

metadata component for each asset type that is to be defined in step 1006" (Column 9,

lines 8-14)," Cataloging is a process for specifying values for an asset's attributes.

Cataloging may occur on two occasions: (1) each time an asset is checked in; and/or

(2) during archival. At checkin time, some attributes are filled-in automatically. For

example, the file size, modification date and time, creator, may all be filled-in

automatically, under program control. Other asset attributes are provided by the user.

For example, keywords used for searching, and indexing, names of attributes, and other

comments are typically filled-in manually by users. At archival time, an archivist may

add additional keywords to the asset attributes via the cataloger tool, if desired. As

described previously, the cataloging function may be helped by the use of the Data

Model Manager object provided in StudioLib 104. The Data Model Manager helps the

cataloging function ensure that all the necessary attributes of an asset type are supplied

for check in and that the values are within the permitted ranges" (Column 12, lines 58-

67-Column 13, lines 1-7), and "In addition to those enumerated above, an AMS data

object may have additional attributes stored with it. Each attribute is given a unique

name, a type and a value. The type that is associated with an attribute is typically

constrained to a predefined set, such as bool, char, long, string, etc. Typically every

instance of the same asset type (e.g. cel, frame, scene, sequence, project), will use

AMS data objects that have the same set of defined attributes" (Column 20, lines 49-

56). Moreover, in response to applicant's argument that the references fail to show

certain features of applicant's invention, it is noted that the features upon which

applicant relies (i.e., "particularly a text for newspaper, magazine or web sites.

Examples of such functions would be Headline, SubHead, Byline, Body Text etc") are

not recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re*

Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant goes on to argue on page 21, that **"These sections of Chiu**

respectfully teach attribute values and relationships between assets, however,

claim 5 recites the dynamic and/or fixed aspects of the planning of news stories to be produced for one or more publications". However, the examiner wishes to refer the applicant to Column 16 of **Chiu** which states "The present invention provides a means for users to link related assets within the Vault repository 108. For example, it may be reasonable to link a scene asset to the assets that are its frames, or a frame to the set of cels that were used to compose it, or a cel to the color model used to paint it. These relationships provide another means for capturing important information about assets" (Column 16, lines 26-32). The examiner further wishes to state that the language "and/or" in the limitation requires only either dynamic or fixed planning to be taught by prior art. The examiner further wishes to state linking assets broadly teaches the fixed planning of usage of PCOs.

Applicant goes on to argue on pages 21-22, that **Claim 1 has been rejected under 35 U.S.C...in view of Nasr"**. The examiner wishes to state that there was typographical error on the non-final rejection mailed on 06/05/2006, and the combination of **Chiu** and **Nasr** was taken to rejected dependent claim 3, as indicated on page 34 of the non-final office action mailed on 06/05/2006.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,6,052,514 issued to **Gill et al.** on 18 April 2000. The subject matter disclosed therein is pertinent to that of claims 1-60 (e.g., methods to provide a distributed publishing access database system).

Article entitled "CCI Europe ALL in One Editorial System", dated October 1997, TechNews, Volume 3, Number 5). The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-60 (e.g., methods to provide a distributed publishing access database system).

Article entitled "Morning News orders 600-seat CCI system", dated November 1998, by Mike Tartar. The subject matter disclosed therein is pertinent to that of claims 1-3, and 60 (e.g., methods to provide a distributed publishing access database system).

Article entitled "NEXPO 97: Single Footprint Editorial Workstation from CCI Europe", dated April 1997, by Nexpo. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-60 (e.g., methods to provide a distributed publishing access database system).

Article entitled "The CCI NewsDesk Editorial System" by CCI. Dated 02/09/1998. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-60 (e.g., methods to provide a distributed publishing access database system).

Article entitled "CCI in Phoenix: 1100 pages a week and only a few problems, by Bryan, dated May 1997. The subject matter disclosed therein is pertinent to that of claims 1-3, and 5-60 (e.g., methods to provide a distributed publishing access database system).

14.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

15.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi
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February 16, 2007

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